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| 10/566,847   | 08/16/2006  | Briant Enoch Benson  | 200400034                        | 9760                        |
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| Entegris, Inc.<br>129 CONCORD ROAD<br>BILLERICA, MA 01821-4600 |             |                      | EXAMINER<br>GUIDOTTI, LAURA COLE |                             |
|  |             |                      | ART UNIT<br>3727                 | PAPER NUMBER                |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/566,847

**Applicant(s)**

BENSON, BRIANT ENOCH

**Examiner**

Laura C. Guidotti

**Art Unit**

3727

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 70-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 78, 79, 81-88 and 90 is/are allowed.
- 6) ☒ Claim(s) 1-10 and 89 is/are rejected.
- 7) ☒ Claim(s) 11, 70-77 and 80 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 07/06/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Objections***

1. Claims 70-77 and 80 are objected to because of the following informalities:

In claim 70, within the preamble, the recitation of "(based on original claim 1)" should not be present.

Claims 71-72 and 76 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims all include limitations previously made in independent claim 70 from which these claims depend.

Claim 80 Line 3 includes the text "([0032])" which should not be present in the claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 89 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 89 states that a limitation of the independent claim 78, from which claim 89 depends, is optional. This is improper and unclear.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Andros, US 5,311,634.

Andros discloses the claimed invention including a rotatable base (12) having one or more through channels (15) that permits fluid flow between an inner and outer surface of the base (as fluid is capable of flowing between a top and bottom surface of the base), a porous material covers at least a portion of the outer surface of the base (17; Column 6 Lines 7-15; see Figures), the porous material interlocked with the rotatable base (see Figures; Column 3 Lines 40-48)(claim 1). Regarding claim 2, the porous material fills one or more of the through channels (see Figures; Column 3 Lines 43-46). Regarding claim 3, the porous material covers a portion of the inner surface of the rotatable base (see Figures). Regarding claim 4, the rotatable base further includes a fitting for mounting the base to a rotatable shaft (27; Column 4 Lines 29-40). Regarding claim 5, the porous material is a pad having one or more nodules (20). Regarding claim 6, the porous material interlocks with the rotatable base by an adhering porous pad layer (Column 3 Lines 47-49). Regarding claim 7, the porous pad interlocks with the rotatable base by filling one or more of the through channels (see Figures; Column 3 Lines 40-47). Regarding claim 8, the porous material is a porous sponge

material that includes polyvinyl alcohol (Column 6 Lines 56-58) that is cast on the outer surface of the base (Column 3 Lines 40-46).

4. Claims 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by McMullen et al., US 2002/0100132.

McMullen et al. disclose the claimed invention including a rotatable base (314, paragraphs 31, 48, 50) with an adherent porous pad material (300) having protrusions (304) cast on the rotatable base (Figure 3), the adherent porous pad material covering at least a portion of an outer surface of the rotatable base (Figure 3), the rotatable base has an inner surface and through channels fluidly connecting its inner and outer surface (channels 314a, Figure 3, paragraph 31), the adherent porous pad material permits fluid flow through the adherent porous pad material (paragraphs 31-32). Regarding claim 10, the base includes a first layer of the adherent porous pad material (in that the base may include 312, Figure 3).

5. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Vail et al., US 6,247,197.

Vail et al. disclose the claimed invention including a rotatable base (331) with an adherent porous pad material (26A) having protrusions (340) cast on the rotatable base (Figure 7), the adherent porous pad material covering at least a portion of an outer surface of the rotatable base (Figure 7), the rotatable base has an inner surface and through channels fluidly connecting its inner and outer surface (344, Column 8 Lines 43-45), the adherent porous pad material permits fluid flow through the adherent porous pad material (Column 3 Lines 62-67).

***Allowable Subject Matter***

5. Claims 70-88 and 90 are allowed.

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 89 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

None of the prior art made of record discloses, teaches, or suggests a hollow base having one or more through channels that permit fluid to flow between an inner surface and an outer surface, whereby a porous sponge material *that covers a portion of the inner surface* of the hollow rotatable base reduces a volume of the hollow rotatable base, the porous sponge material covers at least a portion of the outer surface of the hollow rotatable base and *fills one or more of the through channels*, the porous sponge material *interlocked* with the hollow rotatable base. Also, none of the prior art made of record discloses, teaches, or suggests a hollow rotatable base with an adherent porous pad material having protrusions on the hollow rotatable base, the adherent porous pad material covers at least a portion of the outer surface of the hollow rotatable base, the hollow rotatable base having an endcap and an inner surface that define a volume for holding a fluid and through channels that fluidly connect the inner

and outer surfaces, the adherent porous pad material permits fluid flow through the pad material and *fills one or more through channels in the hollow rotatable base*.

Most particularly, the device of Andros US 5,311,634 is not hollow. Also, neither Vail et al. nor McMullen et al. disclose that the sponge material covers a portion of an inner surface of the hollow rotatable base and reduces a volume of the hollow of the rotatable base, that the sponge material fills one or more of the through channels, or is interlocked.

### ***Response to Arguments***

7. Applicant's arguments filed 06 July 2009 have been fully considered but they are not persuasive.

Regarding Andros as it pertains to claim 1, the Applicant argues that Andros is clearly a solid and only includes outer surfaces, that the top 13 and bottom 14 constitute opposed major surfaces. The Examiner respectfully disagrees. First, Claim 1 does not require the base to be hollow. Second, the top or bottom may be considered the inner and outer surfaces as the base relates to the overall device as a whole. When assembled (as in Figure 3) a user may consider any of the "major surfaces" 13 or 14 as being "inner" if it faces a user or as "outer" if it faces outwardly from the user.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Wednesday, 6am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura C Guidotti/  
Primary Examiner, Art Unit 3727

lcg